

MOTHS IN BRITTANY AND CORNWALL

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IN 1988 I visited the nature reserve Michel-Herve Julien at Cap Sizun near Douarnenez on the coast of Brittany in order to study the moths. The reserve is a haven for seabirds, but is also interesting for its plants and animals. The granite cliffs covered with western gorse and heather provide a habitat very similar to the maritime heathland of Cornwall. I found that the 68 moth species caught here between 2nd and 5th June 1989 were very similar to those caught in Cornwall, although some species such as *Rivula sericealis* (Straw Dot) seemed to be flying some three weeks earlier than in Cornwall. All the moths that I found in Brittany at this time occur in Cornwall, although *Euproctis chrysorrhoea* (Brown-tail), *Nudaria mundana* (Muslin Footman) and *Eilema complana* (Scarce Footman) are rare. I compared the moths of the reserve with the moths of a similar habitat in Cornwall and concluded that the lepidoptera of each place was similar (Spalding, 1989).

I returned to the reserve between 17th and 19th July 1990 to record moths, searching by day and using two traps and a mercury vapour lamp at night. The actinic traps were weighted down with stones against the wind. I recorded a total of 121 species, most of which I have found to be equally common on the coast of Cornwall such as *Hada nana* (The Shears) and *Hadena perplexa* (Tawny Shears). There were numerous *Cilix glaucata* (Chinese Character), hard to find on the granite rocks. The presence of trees such as sallow at the top of the cliff explained the presence of *Epione repandaria* (Bordered Beauty) and *Ipimorpha subtusa* (The Olive), which I had not expected to see so close to the coast.

Some of the species have been found in Cornwall, but are very rare there. The lovely moth *Lozotaeniodes formosanus* is spreading westwards through England and was first recorded in Cornwall by S.C. Madge in 1990. Its distribution in Brittany is not well known but it occurs in Europe as far as Russia (Bradley, Tremewan & Smith, 1973). Another species extending its range in Britain is *Hyloicus pinastri* (Pine Hawk-moth), which was first recorded in Cornwall in Newquay in 1976 (Smith, 1984). Both species feed on Scots pine, which is present at the edge of the Cap Sizun reserve. I was surprised to find a single *Laspeyria flexula* (Beautiful Hook-tip). This species is rare in Cornwall and has only been found three times (Doubekblois 1902, Bodinnick 1961 and Liskeard 1990). It is a woodland species in Britain and at Cap Sizun the larvae probably feed on lichens in the extensive blackthorn thickets covering the cliffs. I recorded a single *Cyclophora punctaria* (Maiden's Blush) at actinic light. This is an oak-feeding species (although I could see no oak nearby) and is rarely recorded in Cornwall (a single was recorded on the coast at Donderry in 1990). The

coastal species *Cucullia absinthii* (The Wormwood) has not been seen for several years in Cornwall, but occurs at Cap Sizun. *Mutuuraia terrealis*, which feeds on goldenrod, has only been recorded in a few places in Cornwall. *Gastrophacha quercifolia* (The Lappet) and *Idaea vulpinaria* (Least Carpet) have not been found in Cornwall for nearly 100 years.

Several species were found which are regular migrants in Cornwall. Some of these species probably breed in Brittany, others are migrants from further south. The single specimen of *Euplagia quadripunctaria* (Jersey Tiger) found at Cap Sizun is probably from a local population, as this species breeds throughout France. The occasional sightings in Cornwall are probably vagrants from Devon or the Channel Islands. Several migrant species were recorded on each night, including *Autographa gamma* (Silver Y), *Peridroma saucia* (Pearly Underwing), *Rhodometra sacraria* (The Vestal), *Udea ferrugalis* and large numbers of *Nomophila noctuella*. It is possible that some of these moths were on their way northwards to Britain. *Agrotis ipsilon* (Dark Sword Grass) was common and probably breeds here in the summer before returning to the Mediterranean region in the winter. *Mythimna unipuncta* (White-speck) was abundant and may be resident here over mild winters. It is spreading northwards in France (Heath & Emmet, 1979). Large numbers were recorded in Cornwall in 1989, some of which may have survived to produce a generation in 1990. I recorded a single *Heliothis peltigera* (Bordered Straw) at Cap Sizun on 19th July. This sub-tropical species is unlikely to breed in Brittany, although I have found it commonly in the Dordogne region 400 miles south of Brittany.

Eleven species (9% of the total) have not been found in Cornwall. *Pleurota bicostella* and *Oegoconia caradjai* have not been found in Cornwall to my knowledge. *Clostera curtula* (Chocolate-tip) and *Eremobia ochroleuca* (Dusky Sallow) are south-eastern species in Britain and have not reached Cornwall. The British subspecies (*bivittata*) of *Coscinia cribraria* (Speckled Footman) is confined to the heathlands of the New Forest, whereas the paler subspecies *arenaria* was abundant on the coast at Cap Sizun, where it was well camouflaged on the lichen-covered granite rocks. *Idaea contiguarua* (Weaver's Wave) is confined in Britain to the Welsh mountains, but was common at Cap Sizun. I found several *Meganola albula* (Kent Black Arches) on the reserve but it has not been found in Cornwall, although it has been found on the Isles of Scilly. A single *Dendrolimus pini* (Pine-tree Lappet) was recorded on 19th June. According to South (1961) this species has been recorded twice in Britain (Richmond Park and in the Norwich Hospital). It has also been recorded in the Channel Isles (Peet, 1989) and is widespread in Europe. I found several *Trachea atriplicis* (Orache Moth), which is now extinct in Britain and the bracken-covered slopes were ideal habitat for *Calloplistria juvenina* (The Latin), which is a very rare migrant in Britain. I recorded the lovely green-winged moth *Polyphaenis sericata* (which feeds on honeysuckle and privet) in three separate areas of the reserve. This species is not on the British list

but is widespread in Europe as far north as Germany. It is perhaps surprising that *Trachea atriplicis*, *Callopietria juvenia* and *Polyphaenis sericata* have not been recorded as migrants in Cornwall, which is not far from Brittany. It is likely that all these species could survive in Cornwall if they were introduced.

The tentative conclusion I reached in 1989 that the moths of Cap Sizun were similar to those found in Cornwall has not been supported by further study. There were a number of moths on the reserve in July 1990 which are either rare in or absent from Cornwall. Continued study of the reserve may show further species that are foreign to Cornwall and possibly to Britain.

References

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***Lithophane leautieri hesperica* Bours. (Lep.: Noctuidae) larvae feeding on common juniper (*Juniperus communis*).**

At Porton Down on the Wiltshire/Hampshire border two larvae of *Lithophane leautieri* were found feeding on native juniper on 25.v.1990. One was on an old juniper at Blakes Firs near Easton Down in Wiltshire (SU2336) and the other on a younger female juniper on the "Breck" area in Hampshire (SU2538). Both were relatively conspicuous on the foliage and were in the penultimate instar. In captivity both larvae fed on common juniper foliage, and after moulting they went into aestivation in spinings. One died, but the other emerged as an adult on 17.x.1990.

Although *L. leautieri* has been recorded in continental Europe feeding on *Juniperus communis* (Heath, J. & Emmet, A.M. (1983) *The moths and butterflies of Great Britain and Ireland*, 10, Harley Books, Colchester), this appears to be the first record for Britain of this native foodplant being utilised. Porton Down has been visited in May every year since 1982 for studies of juniper demography, which include the examination of 200 bushes, and larvae have never been seen before. So it can be assumed that this moth has only recently colonised these large juniper stands. *L. leautieri* is now widely and regularly caught in light traps in West Wiltshire (J. d'Arcy, pers. comm).—L.K. WARD, Institute of Terrestrial Ecology, Furzebrook Research Station, Wareham, Dorset BH20 5AS.